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Schlegel, Hardenberg, and the Point of Romanticism

For Euclid, the point was evident enough to forgo explanation. The definition which initiates the *Elements of Geometry* – »a point is that which has no part«[1] – suffices for the point to take part in the construction of the circles, parabolas, ellipses and hyperbolas which comprise the remainder of the thirteen-book treatise. Early German Romanticism, with its fondness for definitions and formulae, also uses points and geometrical forms to plot conceptual trajectories in a visual field. Romantic statements on the point cover a vast terrain. They do not necessarily distinguish between mathematical and physical points, and they include other points of interest around 1800 (such as the *Fluchtpunkt* or vanishing perspectival point of the work of art and the *punctum saliens* William Harvey observes in chick embryos). For both Friedrich Schlegel and Friedrich von Hardenberg, the point is something which can easily, perhaps too easily, be mobilized, to the degree that its inherent obviousness (or status as an original intuition) becomes more elusive. Even after he summons the point to do the work of history, science, theology and philology, Schlegel can still ask »Does one know what a point is?«[2]

This essay is an attempt to cull through Schlegel's and Hardenberg's widely dispersed statements about the point and identify certain tendencies which could fall under the rubric of what Hardenberg

1 »Σημειον εστιν ου μερος ουθεν.« Euclid's commentators have observed that, unlike his predecessors, Euclid chooses not to define the point, line, and surface by the subsequent term (for example: that the point is the end of a line). For further information on the historical context of this definition, and other possible translations, see Thomas Heath: *The Thirteen Books of Euclid's Elements*. New York 1956, p. 155.

2 »Weiß man was ein Punkt ist?« (*KFSA* 18, p. 229: no. 427). I cite from the *Kritische Friedrich-Schlegel-Ausgabe* (= *KFSA*) throughout. References are to volume, page, and aphorism number.

fleetingly describes as a »philosophy of the point.«[3] The motivation to argue for the ›tendencies‹ of the Romantic point comes from Schlegel himself. One of his better-known aphorisms states, »[w]hoever has a system is just as spiritually lost as he who has none. One has to combine both.«[4] This is, however, only the second half of the aphorism. Before the question of a system is even raised, Schlegel claims that »Every philosopher also has his line – tendency, just as his (salient) point and his cycle.«[5] These figures have a rhetorical function: they provide Schlegel with a way of circumventing the contradiction of having a system and having none, and they also work historically, allowing Schlegel to determine the affinities between different philosophers over time.

Keeping Schlegel's emphasis in mind, I will argue that there are two basic tendencies in the deployment of the point in Romantic thought. The first concerns how the Romantics use the point to construct a trajectory in the history of philosophy. This is a question of points in motion which can be charted and visualized with temporal and spatial coordinates. The second tendency has to do with the importance of the point for the Romantics' own project. This tendency, as it turns out, has just as much to do with points at rest. It reveals itself under the sign of the mechanical lever, which comes as somewhat of a surprise, given that Romantic thinking is usually associated with the metaphors and the particular teleology

3 Novalis: *Schriften. Die Werke Friedrich von Hardenbergs*. Hg. v. Paul Kluckhohn und Richard Samuel. 6 Bde. Stuttgart u. a. 1960 ff (= *NS*): *NS* 3, p. 151: no. 500: »Philosophie des Punkts«. Johannes Hegener: *Die Poetisierung der Wissenschaften bei Novalis*. Bonn 1975, reads this quote in the context of the Romantic theory of the fragment. He observes that it is the characteristic structure of the fragment to collect »everything into a point« so that, as Hardenberg writes, they are both »undetermined« and »absolutely capable«; *NS* 2, p. 540: no. 68, quoted in Hegener, p. 334. For further references to the problem of the point in the critical literature on Romanticism, see Marshall Brown: *The Shape of German Romanticism*. Ithaca, N.Y. 1979; Martin Dyck: *Novalis and Mathematics*. New York 1969, pp. 58-61.

4 »Wer ein System hat, ist so gut geistig verloren, als wer keins hat. Man muß eben beides verbinden«. *KFSA* 18, p. 80: no. 614.

5 »Jeder [Philosoph] hat auch seine Linie – Tendenz wie sein punctum s[aliens] und seinen Cyclus«. *KFSA* 18, p. 80: no. 614.

of organic generation, rather than mechanical clockwork. In the following discussion of the points in motion and at rest in Schlegel's and Hardenberg's aphorisms, the question will also be raised of how the Romantic point connects to the debates in theology, philosophy and the natural sciences that comprise the point's conceptual history.[6] The Romantic point synthesizes these different traditions: not only through reflections on the >constructive character< of philosophy in general, but also by drawing on the specific topics in the history of the point as part of Romanticism's own construct of individuality. The concluding pages offer an example of how this latter aspect of the point might find further application by outlining its relevance to discussions of the Romantic political subject as well.

1. The point at the beginning of philosophy

The point as the *beginning* point of a philosophical construction serves as a reminder, how closely the paths of human intellectual history and the history of nature are intertwined for the Romantics: Hardenberg observes that »we seek the design of the world – yet we are this design – what are we? personified, *all-powerful points*.«[7] The perspective underlying Hardenberg's idea of the self as point and blueprint of the world is a relatively modern development that echoes Leibniz's synthesis of two philosophical positions according to Michel Serres: whereas for Aristotle and Descartes the world was a point, and for Pascal and Bruno in every point there was potentially a world, Leibniz sees »in every real and different individual, the Universal.«[8] Schlegel would concur: as humans, we

6 The history of the point prior to Romanticism has been summarized by Friedrich Kaulbach (s. v. »Punkt, Punktualität«. In: *Historisches Wörterbuch der Philosophie*. Hg. v. Joachim Ritter. Vol. 7. Darmstadt 1971, col. 1711-1714). Kaulbach's entry begins with Aristotle and Zenon and ends with Whitehead and Merleau-Ponty, but it leaves out Romanticism altogether.

7 »Zur Welt suchen wir den *Entwurf* – dieser Entwurf sind wir selbst – was sind wir? personificirte *allmächtige Puncte*«. *NS* 2, p. 541: no. 74.

8 Michel Serres : *Le système de Leibniz et ses modèles mathématiques*. Vol. 2. Paris 1968, p. 739.

have the ability to recognize ourselves as the personified trajectories of history, and as the living blueprints of the world as it has emerged from its point of departure. Schlegel writes that the first chaos is a point from which the world can be constructed:

> Were space full, then time would stand still – that is the 1/0 in the progression of nature. Also once more a chaos but a much higher, completely formed [one]. The first chaos is only a point. – From chaos and allegory the world to be constructed. History of nature from that 0/1 – 1/0. –[9]

The first chaotic point of this aphorism is the beginning of the world and the world's construction through allegorical narrative. Schlegel designates this point as zero, and the history which unfolds from it is one whose end limit, the end of time, is an infinity thick with simultaneous points, marked by a neat inversion of zero and one. As evident as Schlegel's equation of a beginning point with zero might seem to be – in particular, given the Romantic fascination for the figure of *creatio ex nihilo* – only relatively recent developments in mathematics and mechanics make his claim credible in the first place. Wolfgang Schäffner has described how until the seventeenth century, the Euclidean point of geometry was associated not with zero, but with one. This correlation had to do with a prevailing distinction between arithmetic as the science of discontinuous magnitudes and geometry as the science of continuous magnitudes in place since Aristotle. According to this way of looking at things, in arithmetic the >one< was considered the beginning of all numbers, without itself being a number. Schäffner discusses how, according to the older model:

> In the same way as the point was the beginning of all geometry, the number one was the origin of all numbers. Neither

9 »Wäre d[er] Raum voll so würde die Zeit still stehn – das ist das 1/0 in d[er] Progreß.[ion] der Natur. Auch wieder ein Chaos aber ein viel höheres, durchaus gebildetes. Das erste Chaos ist nur ein Punkt. – Aus Chaos und Allegorie die Welt zu construiren. Geschichte der Natur von jenem 0/1 – 1/0. –« *KFSA* 18, p. 421: no. 1226.

of them was itself a part of its domain, but rather its indivisible limit and origin.[10]

Schäffner explains how the Dutch mathematician Simon Stevin, in his 1585 work *Arithmétique*, is in part responsible for changing the status of the point. Stevin's *Arithmétique* begins by defining the concept of ›number‹ as that »through which the quantity of a thing is expressed« and claiming that one is also a number.[11] Importing the idea of continuous magnitudes from geometry into arithmetic, he insists that the one, as basic arithmetical unit, is divisible into parts and should no longer to be considered just a unit of counting. As a consequence of the change in definition, a long-standing equivalence between the one and the geometrical point no longer holds. The one is divisible, the point is not, and Stevin affirms that the indivisibility of the point can only correspond to the zero.[12] In his book, *Signifying Nothing*, Brian Rotman describes the zero in terms of a »meta-sign in relation to the system that generates it.«[13] Because it is both a number and a »sign about num-

10 Wolfgang Schäffner: »The Point: The Smallest Venue of Knowledge in the 17th Century (1585-1665)«. In: *Collection, laboratory, theater: scenes of knowledge in the 17th century*. Helmar Schramm/Ludger Schwarte/Jan Lazardzig eds. Berlin 2005, pp. 57-74: p. 60.

11 Schäffner: »The Point« (see footnote 10), p. 59.

12 Stevin writes: »What does the point have in common with the number one? Certainly nothing at all, since two units result (as is said) in a number, but two or even a thousand points will not result in a line. The unit can be divided into parts [...] but the point is indivisible; the unit is part of the number, but the point is not a part of the line. Therefore, in relation to the number, the unit is not the same as the point in relation to the line. What, then, corresponds to the point? I say it is zero...«. Quoted in Schäffner: »The Point« (see footnote 10), p. 60.

13 Brian Rotman: *Signifying Nothing*. New York 1987, p. 11. Rotman's argument is actually much broader: he shows how the introduction of the zero in mathematical discourse, the initial use of the vanishing point in perspectival painting, and the invention of imaginary money are all events of seismic nature for their respective semiotic systems. Each of these three signs, according to Rotman, has a »natural closure« with regard to the original system (he gives the example of how the special status of the zero led to the invention of the algebraic variable that can potentially stand in for all numbers) (ibid., pp. 28-32). This »closure« of the system within a »meta-sign«, in turn, »accompanies a self-conscious form of subjectivity« (ibid., p. 28). There will be occasion to return to this argument later in the paper.

bers«, it exists both within, and externally to the numerical system.[14] This background information about the zero's special dual status shows that there is a historical precedent for the primitive ambivalence of the point as limit and origin in Schlegel's aphorism, an ambivalence between being something and being nothing indexed by its position and its value of zero, and it also shows that Schlegel relies on a modern equation between geometric and arithmetic magnitudes, or spatial and temporal magnitudes.

The function of allegory in Schlegel's aphorism cited above – by no means self-evident – seems to be to inscribe the zero of the point into a language of world, history, and nature. The human »construction« of the world though allegory that Schlegel describes as the »history of nature« between a zero point and infinity appears in other fragments as the basic formula of philosophical projects:

> There is a [mysticism + critique]/0 – like Fichte's point. Every [philosopher] has, must have such a point. In Spinoza's case it was probably [mysticism + ethics + logic]/0, since Spinoza is of an extremely ethical nature. A progressive philosopher has other inciting points, that not infrequently really limit him, towards which he adjusts himself pp – thus Descartes for Spinoza, Kant for Fichte pp. Around such points then remain dark places in the system. The mixture of the new and the old here often so indissoluble up until the standstill of all understanding, as in similar cases in the realm of ethics. The first point can also be polemical, as with the Skeptics.[15]

14 Rotman: *Signifying Nothing* (see footnote 13), p. 14.

15 »Es gibt eine [Mystik + Kritik]/0 – wie Fichtes Punkt. Jeder [Philosoph] hat, muß einen solchen Punkt haben. Bei Spinosa war es wahrscheinl[ich] [Mystik + Ethik + Logik]/0, da Spinosa eine äusserst ethische Natur ist. Ein progreßiver [Philosoph] hat andre veranlaßende Punkte, die ihn nicht selten real beschränken, an die er sich accomodirt pp – so Descartes für Spinosa, Kant für Fichte pp. Bei solchen Punkten bleiben dann im System dunkle Stellen. Die Mischung der Neuen und d[er] Alten hier oft so unauflöslich, bis zum Stillstehn alles Verstandes, wie in ähnlichen Fällen im [ethischen] Gebiet. – Der erste Punkt kann auch polemisch sein; so beim Skeptiker.« *KFSA* 18, p. 80: no. 609.

In this aphorism, Schlegel suggests that the point operates historically and ahistorically within every system. Every system has its own unique point from which it emerges (his example is Fichte), but there are also those points – Schlegel calls them »inciting points« (»veranlaßende Puncte«) – that apply limits to their immediate philosophical context (like Descartes for Spinoza, Kant for Fichte). These other, historically-inflected points not only place real constraints on each new system, they define »dark places« within it which have a peculiar status. Given the repeated abbreviation »pp« (*per procura*), one could also say that the older philosophers are present in the new system ›by proxy‹. They designate moments of cognitive stasis: an irresolvable conflict of understanding between old and new that manifests itself as the ›standstill of all understanding‹, a lacuna in the historical progression of thought. The irony of the aphorism, that the »progressive« philosopher integrates radically »non-progressive« elements within the system, is effectively a paradox that the aphorism describes and performs at the same time. These elements, defined as the simultaneity of old and new, are analogous to the condition of the temporal standstill we have already seen defined as a thickening of points and the stopping of time. The particular dual historical and ahistorical status of the point as described by Schlegel also reinforces its similarity to the mathematical zero according to Rotman's description of it as a sign both internal and external to the system that generates it. Schlegel's innovation is to reframe the point's dual status in terms of a historical narrative and thereby generate a »poetics« of the point by creating a narrative that remains in tune with its problematic dual status. At the same time, however, it is worth keeping in mind that Schlegel's and Novalis's thinking about the history of philosophy leaves few traces of a direct engagement with those philosophers who actually made the most notable contributions to the discussion of the point from the Renaissance through the eighteenth century. To take the examples of Giordano Bruno and Gottfried Leibniz, both of which figure prominently in the history of the

point,[16] one finds only one or two scattered remarks relating to Bruno's mysticism and Leibniz's concept of the minimum. At best, they can be said to occupy >dark places< in the Romantic poetics of the point: potentially formative, but of obscure causality.

Schlegel's aphorism makes clear the degree to which his thinking about the point and its relevance for philosophy is more indebted to Fichte rather than the canonical philosophers of the point. His equation of an irreducible infinite quantity to the salient point of the philosophical system is a restatement of the Fichtean motto that the entirety of the system should be derivable from its basis.[17] Other aphorisms also illustrate the degree to which Romanticism places particular emphasis on Fichte when it comes to the point. Schlegel might call the philosopher Hülsen the »master in the

16 As Kaulbach has shown, mystical and mathematical discussions of the point play prominent roles in Bruno's work, where one can observe the crystallization of two tendencies: a »dynamic« point concept on the one hand, and the idea of point as »limit« on the other; Kaulbach: »Punkt, Punktualität« (see footnote 6), col. 1711-1712. The first relates to the point as monad, a point of force capable of generating other forms; the second receives further emphasis in Galileo's and Leibniz's discussion of the continuum (for example, as the sum of points traversed by falling objects). Leibniz, in the *Système nouveau* (1695), will eventually distinguish between the metaphysical, the mathematical, and the physical point, whereby the metaphysical is understood as the basis for the other two. It is difficult to summarize Leibniz's thinking about the point because he changed his position significantly over time. The early Leibniz, for example, conceived of the mind within »an unextended and indivisible point« that does not have physical position (Christia Mercer: *Leibniz's Metaphysics. Its Origins and Development*. Cambridge 2001, pp. 161-162); Leibniz later backs away from this position and write that souls »can be in a place« and can also »be in the body they animate«; Robert Merrihew Adams: *Leibniz. Determinist, Theist, Idealist*. New York 1994, p. 251. In turn, the body »makes the soul its point of view« (ibid., p. 252).

17 »Ein [...] vor der Verbindung vorher und unabhängig von ihr gewisser Satz heisst ein *Grundsatz*. Jede Wissenschaft muss einen Grundsatz haben.« Johann Gottlieb Fichte: »Ueber den Begriff der Wissenschaftslehre oder der sogenannten Philosophie« [2. Aufl. Jena/Leipzig 1798]. In: Johann Gottlieb Fichte: *Sämmtliche Werke*. Immanuel Hermann von Fichte, ed. Vol. 1. Berlin 1965, p. 41 (»A proposition [...] which is certain prior to and independently of the association with others, is termed a *first principle*.« Johann Gottlieb Fichte: »Concerning the Concept of the >Wissenschaftslehre<«. In: *Early Philosophical Writings*. Trans. Daniel Breazeale. Ithaca 1988, p. 104).

curve«, but Fichte, whose philosophy »is *at once* point, circle, and straight line«, is undoubtedly the master of the point.[18] Although the Romantic's choice of the word »point« with reference to Fichtean philosophy likely connects to Fichte's desire to unfold his entire system from a single intuition or act of self-positing, Fichte himself is careful to distinguish between the point of departure provided by the *Wissenschaftslehre*,[19] and the science of geometry. In his text *On the Concept of the Wissenschaftslehre or the Socalled Philosophy* (1794; 1798) he writes, »The *Wissenschaftslehre* furnishes us with space as something necessary, and with the point as absolute limit. But it grants to the imagination complete freedom to place the point wherever it likes.«[20] Once this point has been determined – in other words, once it has been posited, and then set in motion, so that the trajectory of a line emerges in our mind's eye – we »no longer find ourselves within the domain of the *Wissenschaftslehre*, but instead within the territory of a particular science [Wissenschaft] called ›geometry.‹«[21] Fichte therefore keeps geometry's task of dividing and constructing within space distinct from the concerns of the *Wissenschaftslehre*. On the basis of this passage, it would seem as if the Romantics did not quite get Fichte's point. They call his philosophy one of geometrical forms, but here he argues for a very rigorous use of language of shapes and forms. Fichte permits a point to be placed just once in an initial gesture of

18 »Hülsen ist Meister in d[er] Curve, Fichte in d[er] Parallele und im Punkte«; *KFSA* 18, p. 204: no. 84; »Fichte's [Philosphie] ist zugleich Punkt, Cirkel und gerade Linie«; *KFSA* 18, p. 31: no. 131.

19 Translated alternately as the »theory« or »science« of knowledge; I will keep the German throughout.

20 Fichte: *Early Philosophical Writings* (see footnote 17), p. 120. »Die Wissenschaftslehre giebt als nothwendig den Raum, und den Punct als absolute Grenze; aber sie lässt der Einbildungskraft die völlige Freiheit den Punct zu setzen, wohin es ihr beliebt«; Fichte: *Sämmtliche Werke*. Vol 1 (see footnote 17), p. 64.

21 Fichte: *Early Philosophical Writings* (see footnote 17), pp. 120-121. The entire passage reads as follows: »Sobald diese Freiheit bestimmt wird, z. B. ihn gegen die Begrenzung des unbegrenzten Raumes fortzubewegen, und dadurch eine Linie zu ziehen, sind wir nicht mehr im Gebiete der Wissenschaftslehre, sondern auf dem Boden einer besonderen Wissenschaft, welche Geometrie heisst.« Fichte: *Sämmtliche Werke*. Vol. 1 (see footnote 17), p. 64.

personal freedom through the exercising of our imagination, but the moment we depart from that initial point – the moment we attempt to inscribe any more of ourselves into the *Wissenschaftslehre* other than the fact that we exist in the first place – we plummet from the aether onto the hard ground of a particular science of shapes called geometry.

Fichte's distinction between a point which is theoretically ›given‹ as opposed to one which is actually ›posited‹ in visual terms, as the difference between the point that one thinks as a concept and the point that one sees before one's eyes, has its corollary in Early Modern commentaries on Euclid as well as Leibniz's distinction between the mathematical and physical point. Here too, Wolfgang Schäffner's work is particularly helpful. Euclid defines the point as »that which has no part« using the Greek word *semeion*, meaning ›sign‹. Schäffner writes that

> [t]he smallest of all venues is a weightless sign which indicates the absence of all sizes and extent. The point is a *semeion*, as in Euclid's *Elements*, the most innocuous sign of all signs, a *stigmé*, as it is called in Aristotle's *Physics*, whose Latin translation *punctum* has been preserved in the words *Punkt/point/punto*: the point is a puncture, a hole actually, from which the world of magnitudes and extensions seems to fall out, an operation of discontinuity and interruption, and at the same time the beginning and the end of all continuous magnitudes.[22]

Schäffner describes how Early Modern commentaries of Euclid's *Elements* led to the distinction between »sign« and »diagram« based on the representation of the point. Geometrical operations require diagrams. They turn mathematical points into physical ones: »in the moment in which the elements of geometry appear as diagrammatic operations, out of the mathematical science of

22 Schäffner: »The Point« (see footnote 10), p. 57.

geometry comes a technology of notation and thus of media«[23] On the basis of a distinction between what can provisionally be called a semiotic and a medial point (»medial« in the sense of something that makes something else visible by disappearing), Fichte seems to opt for the former, and the Romantics for the latter.

When Schlegel and Hardenberg state that philosophy can be charted in geometric shapes and equations which follow the trajectory of the point, they do not differentiate strictly between the creation of geometrical form and philosophical practice: between a theory of philosophy and its *Hilfswissenschaften*. That said, they also do not always converge in their own paths towards the point. The kinds of points discussed so far have tended to initiate trajectories of motion, or, as Schlegel writes, »explosions« and »expansions« of a single point »that must be thought of as greatly mystical.«[24] Without taking it up directly (and perhaps with deliberate emphasis on the earlier, mystical tradition) this tendency correlates to Hobbes' concept of the »conatus,« which describes the motion through a point within an instant.[25] We have also, however, already seen examples of a counter-tendency, where points at

23 »In dem Moment, in dem die Elemente der Geometrie als diagrammatische Operationen erscheinen, wird aus der mathematischen Wissenschaft der Geometrie eine Notations- und damit Medientechnik«, Wolfgang Schäffner, »Stevin, der Punkt und die Zahlen«. In: *›Der liebe Gott steckt im Detail‹: Mikrostrukturen des Wissens*. Wolfgang Schäffner/Sigrid Weigel/Thomas Macho, eds. München 2003, pp. 203-218: p. 206.

24 »Die Ellipse, der Cirkel, die Parabel und Hyperbel sind nur Explosionen, Entwicklungen d[es] Punkts, der höchst mystisch gedacht werden muß. Im primitiven Punkt ist Dualität. Ellipse das erste Symbol desselben; Cirkel und Parabel nur Abweichung, Extreme der Progression aller Nüancen von Ell.[ipse] selbst nicht mehr«; *KFSA* 18, p. 156: no. 398.

25 Hobbes' conatus takes part in a larger debate, whose participants include Galileo and Newton, about the relation of the point concept to a continuum of motion. Hobbes introduces his term as a way of conceptualizing the motion within an infinitely small space and time; see Kurd Lasswitz: *Geschichte der Atomistik vom Mittelalter bis Newton*. Hildesheim 1963, pp. 214-224. Rather than engaging in this discussion directly, Schlegel and Hardenberg's aphorisms draw upon some of the basic questions, such as the tension between points at rest and points and motion, and rework them on a meta-historical level.

rest are embedded in pivotal roles in a particular Romantic notion of the »constructive character« in philosophical development: not only as beginning points and ending points, but also as dark places in the system.[26] While Schlegel's aphorisms are ambivalent in this regard, Hardenberg suggests that although the point can be thought of in the context of motion, it *cannot* itself be conceived in motion: »The point cannot be thought as moved. / Determined sphere of determination. / Basic principles of defining. / Namegiving /«[27]. The aphorism recalls Euclid's early claim that the point has position but not dimensions. The movement of the point in space or time would implicate it in a multi-dimensional figure. Yet, in the logic of this aphorism, the motionless point is not antithetical to a »determined [or definite] sphere of determination.« We have seen other cases that also couple a cognitive impulse with a geometric principle; here the emphasis is not on the creation of a system, but the granting of a name – not to the universal, but to the individual. While the aphorism only hints that the point may have something to do with the subject, other aphorisms which refer to Hardenberg's studies of mechanics offer more revealing clues for understanding his interest in the fixed point. Both Hardenberg and Schlegel focus their attention on a particular point which hovers between the mathematical and the physical, between theory and mechanical application, between sign and diagram, and it is precisely this point with which Schlegel and Novalis inscribe themselves into a philosophy of the subject reaching well beyond Fichte. The central figure in this context is the mechanical lever, and the fulcrum around which it revolves.

2. Fixed points and levers

The history of the lever is a history of the individual's exercise of power. Hardenberg studied mechanics in addition to mathematics

26 Heinz von Foerster's concept of »blind spots« – points that allow for observation but themselves cannot be observed – is relevant here.

27 »Der Punct kann nicht, als bewegt, gedacht werden. / Bestimmte Sfäre der Bestimmung. / Grundsätze des Definirens. / Namengeben /«; *NS* 2, p. 282: no. 629.

and the natural sciences at the mining academy of Freiberg. As a student of mechanics, he of course knew about Archimedes, one of the first theoreticians of the lever. Archimedes described the equilibrium on a simple lever with concepts of weight and distance from a resting point (what scientists today call a »first class« lever: the one which looks like a see-saw or *Wippe*). Pappus of Alexandria has famously reported Archimedes as saying that he would be able to move the earth given just one fixed point.[28] Pappus uses the word *sto* for stand, from the verb *istemi*, from which the word »stasis« is derived. In another record of the quote from Archimedes, Diodorus of Sicily expresses the same sentiment in slightly different language when he writes: »Again, he [Archimedes] used to say, in the Doric speech of Syracuse: ›Give me a place to stand and with a lever I will move the whole world.‹«[29] Instead of *sto*, Diodorus uses *bo*, from *baino*, from which the word »basis« comes. In the first quote, the lever is only implied, with the effect of lending the static »I« an aura of greater strength. The second quote, which cites the instrument, also serves as a reminder that not just one but two points are needed: one upon which to stand, and one upon which to place the lever. There are echoes of both in the philosophical programs of modernity (which is to be expected, in keeping with Michel Serres's suggestion that diverse branches of human thought such as geometry, cosmology or optics, have in common the search for a fixed point, without which measure, order and law are impossible[30]). Descartes writes in the second of his *Meditations* (1641),

28 Pappus of Alexandria: *Collectionis*. Book 8. Berlin 1878, p. 1060. Many thanks to Charitini Douvaldzi for help with the Greek.

29 Diodorus: *The Library of History*. In: *Diodorus of Sicily in Twelve Volumes*. Charles Henry Oldfather, ed. Cambridge, Mass/London 1957, vol. 1, p. 1 - vol. 12, p. 295: vol. 11, p. 195.

30 »[...] de la théorie de l'équilibre à celle du mouvement, de la géometrie pure à la cosmologie, de la science de la vision à la vision du monde et du destin humain, tous ces exemples ont au minimum en commun la *recherche d'un point fixe*. Dans tous les cas, ce point est la *référence* sans laquelle nulle loi ne saurait être établie, nul désordre apparent soumis à la droite raison, nulle définition précisée; et, plus généralement, aucune mesure, aucune proportion, aucun ordre« ; Serres: *Le système de Leibniz* (see footnote 8), pp. 657-658.

> Archimedes claimed, that if only he had a point that was firm and immovable, he would move the whole earth; and great things are likewise to be hoped, if I can find just one little thing that is certain and unshakeable.[31]

While Descartes believes to have found this »immovable« point in which a philosophy is based in the concept of the ego as *res cogitans*, Kant speaks 150 years later of that which »Archimedes needed, but did not find [...] a firm point, upon which reason can place its lever;« this point is, for Kant, the »inner idea of freedom which rests there as secure basis through the unshakeable moral law« and instead of the »world« to be moved is »the human will, even faced with the resistance of all nature through the basic principles [of the idea of freedom].«[32] The persuasiveness of these two statements obscures the fact that Descartes and Kant mobilize the Archimedean point for different purposes. Descartes' reference to the »immovable point« leads him to the one certainty of the *res cogitans*. Kant's metaphor of the »firm point« is spatially more complex and demands that we visualize the point as the place where reason's lever is rested and upon which it turns – the fulcrum. Pure mechanics only requires one point – the fulcrum – to construct a lever, but for the purposes of a philosophy of the individual, there

31 Descartes: *Meditations on First Philosophy*. Trans. Michael Moriarty. Oxford 2008, p. 5.

32 »Hier ist nun das, was Archimedes bedurfte, aber nicht fand: ein fester Punkt, woran die Vernunft ihren Hebel ansetzen kann, und zwar, ohne ihn weder an die gegenwärtige, noch eine künftige Welt, sondern bloß an ihre innere Idee der Freiheit, die durch das ›unerschütterliche‹ moralische Gesetz als sichere Grundlage darliegt, anzulegen, um den menschlichen Willen selbst beim Widerstande der ganzen Natur durch ihre Grundsätze zu bewegen.« Immanuel Kant: »Von einem neuerdings erhobenen vornehmen Ton in der Philosophie« (1796). In: Ders.: *Werkausgabe*. Wilhelm Weischedel, ed. Vol. 8. Frankfurt 1977, p. 403. Lasswitz summarizes the two moments of the »Copernican experience« posited by Kant in terms of the recognition of individual freedom and the self-awareness necessary to realize the apparent deception of the empirical standpoint. We can also connect this moment back to Rotman's argument about the development of a »meta-subject«. For Serres, the Copernican Revolution is not a paradigm in itself, but another example of the search for a fixed reference point; see Serres, *Le système de Leibniz* (see footnote 8), p. 661.

need to be at least two: one for the machine, and the other for the agent who manipulates it. Two firm points, that is, which augment the reach of the human will and knowledge considerably. I would like to emphasize in the following pages that one of Romanticism's idiosyncrasies in this regard is to stake its own ground in the philosophy of the point by refusing to privilege one point over the other, a claim that requires taking a closer look at Schlegel and Hardenberg's appropriation of the lever.

Just one technical term is required to understand what Hardenberg and Schlegel have to say about the lever. In addition to referring to the fulcrum as the *Drehpunkt* or *Stützpunkt*, as was common around 1800 and still in usage today, they also use the Greek word *hypomochlion*, whose literal meaning of ›resting beneath‹ shares the same etymology with the word *subject*.[33] In Schlegel's notes, there is a clear structural affiliation between those aphorisms which define the point generally as the beginning of a philosophical system, and those which focus on the particular mechanical point of the hypomochlion. »For a theory of construction,« he writes, »the lever [is] extremely important. Every universe for example has its *hypomochlion* and its point of indifference.«[34] Schlegel also marshals the particular mechanics of the lever – which, in its simplest model, positions the fulcrum between two arms, balancing two forces – to strengthen his comparison. Just as the hypomochlion is that point where opposing forces cancel out, Schlegel writes: »Perhaps the center in every universe is *doubled*, in the literal sense *heterogeneous*, One from two, two at the

33 I would like to thank Edgar Landgraf for pointing out this correlation.

34 »Zur Theorie d[er] Construction der Hebel äußerst wichtig. Jedes Universum z. B. hat sein *Hypomochlion* wie seinen Indifferenzpunkt«; *KFSA* 18, p. 170: no. 550. See also Brown: *The Shape of German Romanticism* (see footnote 3), for a different perspective. With reference to Herder's »vocabulary of linear organization and of the balance of opposing forces,« Brown writes that such language was »by no means absent in the Romantic period,« it was usually integrated into »the more characteristically Romantic circle« (p. 33); Brown emphasizes that the Romantics »advance beyond the mechanistic world view« (ibid.). My reading suggests that the »mechanistic world view« is not abandoned, simply reconfigured, and needs further study even – or especially – in the context of Romantic organicism.

 same time from different orders.«[35] Schlegel does not give us much to go on, but it helps to remember that the fulcrum doubles as a mathematical (imaginary) *and* a physical point. The examples of heterogeneity Schlegel chooses in this particular aphorism are temperature and (acoustic) »accord,« but the intrinsically doubled nature of the fulcrum recalls the irreducible »dark places« seen before in the mixtures of old and new coexisting within a philosophical system. Schlegel also connects the hypomochlion directly to the individual when he writes: »*Hypomochlion* [is] only symbol, the true is hovering [*schwebend*]; the active free human is his own hypomochlion.«[36] In this note, found in close proximity to the one just cited before from Schlegel's *Philosophical Fragments*, we are left to puzzle whether the doubled, heterogeneous nature of the hypomochlion which Schlegel has just insisted upon still holds true. What does it mean for man to be his own hypomochlion, his own fulcrum? We are far removed from both Descartes' and Kant's meditations on an individual whose powers were augmented through the *use* of the lever and closer to a model where individual is fulcrum and lever at once. If there is a duplicity to be observed in the positing of man as the fulcrum point, then it seems to be not in a mixture of contrary elements (for example, the individual's own »system« as opposed to the one imposed upon him by his cultural environment), but in the tension between what is »only symbol« and that which is »true« and *schwebend* – the tension between the fixed point of the fulcrum and the mobile arms of the lever.

Hardenberg's aphorisms do not contain any statement as simple as the one that man is his own hypomochlion. They do, however, engage more directly with the technology of the lever and the mechanical laws governing it. From his notes we know that he learned the laws of the lever by reading and excerpting from Eschenmayer's *Principles of Nature-Metaphysics Applied to Chemical and Med-*

35 »Vielleicht ist das Centrum in jedem Universum *doppelt* im eigentl[ichen] Sinne *heterogen*, Eins aus zweien, zwei zugleich aus verschiednen Ordnungen«; *KFSA* 18, p. 171: no. 550.

36 »*Hypomochlion* nur Symbol, das wahre ist schwebend; der thätige freie Mensch ist sein eigenes Hypomochlion«; *KFSA* 18, p. 171: no. 560.

ical Topics (1797), in which Eschenmayer applies Fichtean principles to the natural sciences. In this text, Eschenmayer defines the hypomochlion for what scientists would call a »first-class« lever in the following way:

> We can imagine to ourselves the arms of a lever with their forces as two magnitudes of motion, and regard the hypomochlion as the point in which both magnitudes work against each other. Since the arms of the lever represent lines whose separated endpoints cannot be moved, without at the same time the points at the center of motion are also moved, thus the moments [Zeiten], in which the forces of the lever work upon the hypomochlion, the same even with every inequality in the lengths of the arms.[37]

The forces Eschenmayer describes refer to the lever's moment of torque or *Drehmoment*, as the force of turning. Hardenberg excerpts this definition from Eschenmayer and expands it with the comment: »One should not speak of magnitudes [*Größen*] but rather of *strengths* and *weaknesses* of the *motion*.«[38] He thereby emphasizes an interplay between the increasing and decreasing forces. And, on the basis of Eschenmayer's explanation of the principle of the torque moment as product of weight and distance from fulcrum (whereby the concept of »equilibrium« in the context of the lever means that the sum of all torque moments is zero), Hardenberg elaborates: »more *intensity* as opposed to greater *exten-*

37 »Wir können uns die Aerme eines Hebels mit ihren Kräften als zwei Bewegungsgrößen vorstellen, und das Hypomochlion als den Punkt ansehen, in welchem beide Grössen gegeneinander wirken. Da nun die Aerme des Hebels Linien vorstellen, deren entfernte Endpunkte nicht bewegt werden können, ohne daß zu gleicher Zeit auch die am Centro motus gelegene[n] Punkte der Linien bewegt werden, so sind die Zeiten, in der die Kräfte des Hebels auf das Hypomochlion wirken, auch bei jeder Ungleichheit der Länge der Aerme dennoch gleich.« Carl A. Eschenmayer: *Säze aus der Natur-Metaphysik auf chemische und medicinische Gegenstände angewandt*. Tübingen 1797, pp. xiv-xv.

38 »Man sollte nicht von Größen, sondern von *Stärken* und *Schwächen* der *Bewegung* reden«; *NS* 2, p. 381.

sity.«[39] A tendency just starting to form here becomes more evident in his later notes when he writes »The lever is absolutely without rigid lines and point of support to be explained from the theory of force in general – the central forces in general.«[40] Whereas Schlegel embraced the hypomochlion as the metaphorical center-point of both the universe and the individual, Hardenberg, in the context of his studies of mechanics, suggests that we can do away with it altogether. According to this aphorism, we can define what the lever does just as adequately with the concept of forces alone[41] as we can when we rely upon a model diagrammed through lines and points.

Despite the apparent simplicity of Hardenberg's call for a lever without rigid lines and point of support – and one can at least sense intuitively the basic change he describes – it is by no means obvious what implications he would like to draw from it or even what kind of scientific reasoning would support such a claim. If you want to have a lever around 1800, you must have a point.[42] We can perhaps resolve the contradiction with the thought that the equilibrium of a lever does not depend on the actual point from which one calculates its forces. In this sense, the choice of point is arbitrary, the ful-

39 »Mehr *Intensität* gegen größere *Extensität*. Mithin muß zur Herstellung des Gleichgewichts – am kürzeren Arm eine stärkere Masse hängen, oder darauf drücken – um so zu kompensiren«; *NS* 2, p. 381.

40 »Der Hebel ist schlechthin ohne starre Linien und Unterstützungspunct aus der Lehre der Kraft überhaupt – den Centralkräften überhaupt zu erklären«; *NS* 3, p. 470: no. 1105. See also: »Neue Deduktion des Hebels, aus dem *Hebepuncte* etc. durch Centrifugalkraft«; *NS* 3, pp. 442-443: no. 907; »Der Hebel muß, wie mich dünkt, nach Gesetzen der *himmlischen Mechanik* erklärt werden – nach Gesetzen der Anziehung. Die Anziehung ist nicht directe [sic], sondern in Beziehung auf einen dritten Punct – *centralisch*. (Über die Centralpuncte)«; *NS* 3, p. 77.

41 »*Centralkräfte*« around 1800 usually refer to centripetal and centrifugal forces. See for a description of these terms as well as a cautionary note Johann Samuel Traugott Gehler: »Centralkräfte«. In: Ders.: *Physikalisches Wörterbuch oder Versuch einer Erklärung der vornehmsten Begriffe und Kunstwörter der Naturlehre*. Leipzig 1787, p. 487-502.

42 In some ways, Hardenberg is ahead of his time in this regard, since the equivalent of a lever without fulcrum will not be scientifically verified until the advent of general relativity theory.

crum is less of a privileged position.[43] These developments in how modern physics describes the lever and its forces, which lead to the devaluation of any single point, have at least two consequences. First, when required to confront »forces« rather than »rigid lines,« instead of the visual metaphor of a »lever of reason« (Kant) we are left with an abstraction that can less easily be visualized. And secondly: Hardenberg, more so than Schlegel, mobilizes the concept of force as a way of downplaying nostalgia for any particular position of the hypomochlion (or subject). He recognizes that the lever can be manipulated as a means for increasing individual force – in the Archimedean sense – but he also imagines situations where the individual assumes the position of the fulcrum:

> The temper [*Stimmung*] of the consciousness – of representation of every kind is the temper of crystallization, of the formation – and manifold-making – thus *held rest – static force* – rationalizing (equilibrizing) force – proportional force of evolution – a *constant quantity* in the shifting alternation (point of rest on the lever)[44].

As in the mechanical-theoretical descriptions, here too the fulcrum point has become almost unnecessary, parenthetical, and the lever is simply the metaphorical figure of a *Stimmung* (which could also be thought of as a »mood« or a »disposition«). The images of rest, of forces in harmony, or of controlled and balanced mobility, stand in stark contrast to those contexts in which the point explodes into geometrical figures of infinite scale, and also to the mighty lever of reason. The notion that the hypomochlion acts as a model of transition between mathematical and mechanical abstractions

43 That means that one can make the same calculation from every point on the lever and arrive at the result that the total force of the weights on the lever are equivalent to the force of the fulcrum.

44 »Die Stimmung d[es] B[ewußt]S[eyns] – des Darstellens aller Art ist die Stimmung des Krystallisirens, der Bildung – und Vermannichfachung – also *gehaltne Ruhe – statische Kraft* – rationalisirende (equilibrirende) Kraft – proportionelle Evolutionskraft – eine *beständige Größe* im veränderlichen Wechsel (Ruhepunkt am Hebel)«; *NS* 3, p. 432: no. 836.

on the one hand and the organism on the other, as this aphorism suggests, is also illuminating with regard to other aphorisms from the same manuscript where Hardenberg tests out the lever's exemplary balance in transitional moments. A neighboring aphorism, for example, refers to Kielmeyer's concept of a balance of compensating forces in the living organism: »Kielmeyer's idea about the transition of one force into the other – (of its successive and *simultaneous* existence.) (Synthesis of the *antique* and *modern*).«[45] A second aphorism from the same manuscript page envisions the transition from child to man through designated points which could chart the change within a greater continuum.[46] As fleeting as these examples are, they show how Hardenberg thematizes the ability of the lever to act indirectly, as part of a larger process.[47] He distills from the mechanics of the lever a particular rhetorical figure, the figure of transition and the preservation of opposites, which already has an established currency in his scientific and philosophical work: it is the well-known figure of galvanic chains and the Voltaic pile.

3. Final points

The purpose of this paper has been to highlight the idiosyncrasies in Schlegel's and Hardenberg's writing on the point while at the same time examining ways in which they connect to a tradition of

45 »Kielmeyers Idee vom Übergang einer Kraft in die Andre – (von ihrer Successiven und *Simultanen* Existenz.) (Synth[esis] d[er] *Antike* und *Moderne*)«; *NS* 3, p. 432: no. 838. Hardenberg refers here to Kielmeyer's theory of a compensation that maintains a balance of forces in the living organism. The synthesis of old and new recalls the »dark places« of the philosophical systems as described by Schlegel.

46 »*Inpunctationsmanier* der *Bezeichnung* der Veränderungen des Stätigen. z. B. Übergang des Kindes zum Manne. Bezeichnung des Übergangs, (d[er] *Seele*,) mit *Puncten*«; *NS* 3, p. 432: no. 833.

47 The lever therefore belongs to the »indirect tools« of Hardenberg's oeuvre and what has alternately been called his »indirect technique (Liedtke) and »indirect construction« (Gaier). See Ralf Liedtke: *Das romantische Paradigma der Chemie*. Paderborn 2003; Ulrich Gaier: *Krumme Regel*. Tübingen 1970.

philosophical inquiry which has itself struggled with one of the »simplest« yet also most elusive of all concepts. The connection between the Romantics and the philosophical tradition, as described in the previous pages, is elusive: Schlegel's and Hardenberg's own narrative of philosophical points seems to harbor its own »dark places« with reference to seventeenth- and eighteenth-century debates on the point. This does not amount to a reinvention of the concept, however. Rather, Schlegel and Hardenberg's thinking takes up several common problems in the historical debates on the point and reworks them in ingenious ways. Questions pertaining to the distinction between mathematical and physical points, the relation of the point to motion, and the usefulness of the point in the conception and demarcation of a subject position, each resonate in Romantic musings on the point. In particular, this paper explored two scenarios which concretized the otherwise scattered »philosophy of the point« to which Hardenberg alludes: the first was the figure of the trajectory generated by an »inciting« point; the second was the figure of the mechanical lever. Each of these scenarios raises – if indirectly – the question of individual power, and each of them can be seen as a response to a potential paradox about the point's dual status of being inside and outside at once. For Schlegel, this leads to the positing of locations of hybridity within the system, described in terms of doubled historicity and ahistoricity. For Hardenberg, the mechanical lever becomes a locus where the individual is effectively replaced by a balance of forces, an idea that takes the old Archimedean topos in a new light while at the same time recalling the ambivalence of the mathematical and the physical point.

As a concluding thought that could also be a point of departure for further research, one could also pursue the relationship between the mathematical and the physical point even further in the context of Romantic political thinking. Hardenberg's thought that we are »personified, all-powerful points« who seek the »design« (*Entwurf*) eventually unfolds from the individual to the political unit of the family when one reads the aphorism to the end: »[o]nly insofar as man conducts a happy marriage with himself – and makes up a beautiful family, is he at all capable of marriage

 and family«[48] When he writes about marriage, he says that it is to politics »what the lever is for the theory of mechanics« and that »[t]he state is comprised not of individual people, but rather of pairs and societies.«[49] For Hardenberg, then, the basic unit of the functioning state is not the personified point, but a lever whose two arms connect the disparate conditions of woman and man. It is striking that the lever in this description conforms to Hardenberg's idea of a balance of forces with no rigid lines and points in that it has no fulcrum, no hypomochlion; it is tempting to say: no particular »subject.« In this model, the relation of the individual to the machine-state is not simply one of part and whole, which would be the case of the point-individual who is part of either the greater mechanical clockwork or an organism. Instead, the disposition of the pair stands in for the state as a whole, but the pairing of »formed« man and »unformed« woman suggests that the levers of this particular mechanism move in a dynamic compensation and transfer of forces.[50] This example, which emphasizes the mobility of the point (and the lever), also serves as a reminder as to why, though overlooked, it fits so well in a Romantic pantheon of concepts cultivated to move easily across discursive divides.

48 »Zur Welt suchen wir den *Entwurf* – dieser Entwurf sind wir selbst – was sind wir? personificirte *allmächtige Puncte*. Die Ausführung, als Bild des Entwurfs, muß ihm [dem Entwurf] aber auch in der Freythätigkeit und Selbstbeziehung gleich seyn – und umgekehrt. Das Leben oder das Wesen des Geistes besteht also in Zeugung Gebährung und Erziehung seines Gleichen. Nur insofern der Mensch also mit sich selbst eine glückliche Ehe führt – und eine schöne Familie ausmacht, ist er überhaupt Ehe und Familienfähig. Act der Selbstumarmung«; *NS* 2, p. 541: no. 74.

49 »Die Ehe ist für die Politik, was der Hebel für die Maschinenlehre. Der Staat besteht nicht aus einzelnen Menschen, sondern aus Paaren und Gesellschaften. Die Stände der Ehe sind die Stände des Staats – Frau und Mann. Die Frau ist der sog[enannte] *ungebildete* Theil«; *NS* 3, p. 470: no. 1106.

50 One could elaborate these comments in connection with Hardenberg's view on monarchy. In *Faith and Love*, for example, he writes that monarchy is »a true system, because it is bound to an absolute middle point; to a being, which belongs to humanity, but not to the state.« (»Die Monarchie ist deswegen ein ächtes System, weil sie an einen absoluten Mittelpunct geknüpft ist; an ein Wesen, was zur Menschheit, aber nicht zum Staat gehört«; NS 2, p. 489. What kind of point is the »absolute middle point« of the monarchy? It is a being who belongs to humanity but not to the state«. »The king is no citizen of the state, and no state official« (ibid.).